

# **BCA CROWN CERTIFICATE**

Pursuant to Section 6.28 of the Environmental Planning & Assessment Act 1979

CERTIFICATE No.: CRO-23021

DATE OF CERTIFICATE: 19 June 2023

SUBJECT LAND:

Lot & DP Lot 2 DP 1043580

Address 5-39 Animoo Avenue
Griffith NSW 2680

LOCAL GOVERNMENT AREA: Griffith City Council

**APPLICANT:** 

Name Arjuna Thiru Moorthy
Company Health Infrastructure
Address 1 Reserve Road

St Leonards NSW 2065

Phone/Email Phone: (02) 9978 5402 Mobile: 0433 940 767

Email: Arjuna.thirumoorthy@health.nsw.gov.au

OWNER:

Name Health Administration Corporation

Address 1 Reserve Road

St Leonards NSW 2065

Phone / Email Phone: 02 9978 5402

PLANNING APPROVAL (WHERE

APPLICABLE):

SSD No.:

Date of Determination

SSD-9838218

14 October 2021

**DESCRIPTION OF DEVELOPMENT:** 

Crown Certificate 4 - Milestones 1 & 3 Fitout & Services in association with the new four (4) storey CSB only to the exclusion of CSB linkways and all External works;

In associated with the Griffith Base Hospital Redevelopment comprising of;

Design Finalisation & Construction of a new four-storey Clinical Services Building containing:

- Emergency department.
- · Medical Imaging
- Outpatient Services to include clinics, allied health and rehabilitation, oncology, Hospital in the Home and renal.
- Pharmacy, pathology, medical records and administration facilities.
- Perioperative unit, critical care / intensive care unit.
- Maternity and birthing unit and Paediatric unit.
- Medical inpatient unit and Surgical inpatient unit.
- An aged care and rehabilitation inpatient unit.
- · Main entry with retail café.
- Enclosed clinical pedestrian link to the adjoining St Vincent's Private Community Hospital and Non-Clinical Services Building.
- Demolition of remaining buildings vacated and made redundant after commissioning of the new hospital, including required staging and temporary works.
- Construction of site works including roads, car parking and landscaping.
- Signage and wayfinding.
- Refurbishment of the current ACH building for Community Health purposes.

Email: admin@bmplusg.com.au



BCA CLASSIFICATION: Class 5 & 9a

REFERENCED DOCUMENTATION: As listed in Schedule 1

STATUTORY CERTIFICATION:

Pursuant to the provisions of Section 6.28 of the Environmental Planning and Assessment Act 1979, Blackett Maguire + Goldsmith Pty Ltd hereby certifies that the building works have been designed in accordance with the Building Code of Australia 2019 (Amdt

David Blackett BDC 0032

1), subject to the attached Conditions.

CONDITIONS: As listed in Schedule 2

Exclusions: As listed in Schedule 3

PERSON UNDERTAKING CERTIFICATION OF DESIGN ON BEHALF OF THE CROWN:

SIGNATURE

Accredited Certifier in NSW Accreditation No.

Date: 19 June 2023



# SCHEDULE OF DOCUMENTATION

# + Architectural Plans prepared by DJRD Architects:

DRAWING NUMBER	REV	DATE	DRAWING NUMBER	REV	DATE
130565-DJRD-AR-DWG-B36_02- 0100	H	16.06.2023	130565-DJRD-AR-DWG-B36_02- 0200	G	16.06.2023
130565-DJRD-AR-DWG-B36_02- 0300	F	16.06.2023	130565-DJRD-AR-DWG-B36_02- 0400	G	16.06.2023
130565-DJRD-AR-DWG-B36_02- 0500	G	16.06.2023	130565-DJRD-AR-DWG-B36_14- 0101	G	16.06.2023
130565-DJRD-AR-DWG-B36_14- 0201	Н	16.06.2023	130565-DJRD-AR-DWG-B36_14- 0202	Н	16.06.2023
130565-DJRD-AR-DWG-B36_14- 0301	G	16.06.2023	130565-DJRD-AR-DWG-B36_14- 0401	G	16.06.2023
130565-DJRD-AR-DWG-B36_14- 0402	F	16.06.2023	130565-DJRD-AR-DWG-B36_14- 0502	F	16.06.2023
130565-DJRD-AR-DWG-B36_14- 0601	D	16.06.2023	130565-DJRD-AR-DWG-B36_14- 0602	D	16.06.2023
130565-DJRD-AR-DWG-B36_17- 0101	E	16.06.2023	130565-DJRD-AR-DWG-B36_17- 0201	G	16.06.2023
130565-DJRD-AR-DWG-B36_17- 0202	G	16.06.2023	130565-DJRD-AR-DWG-B36_17- 0301	F	16.06.2023
130565-DJRD-AR-DWG-B36_17- 0302	F	16.06.2023	130565-DJRD-AR-DWG-B36_17- 0401	Е	16.06.2023
130565-DJRD-AR-DWG-B36_17- 0402	Е	16.06.2023	130565-DJRD-AR-DWG-B36_18- 0201	С	16.06.2023
130565-DJRD-AR-DWG-B36_18- 0202	D	16.06.2023	130565-DJRD-AR-DWG-B36_18- 0301	С	16.06.2023
130565-DJRD-AR-DWG-B36_18- 0401	С	16.06.2023	130565-DJRD-AR-DWG-B36_18- 0402	В	16.06.2023
130565-DJRD-AR-DWG-B36_40- 0004в	С	16.06.2023			

## + Other documents:

İTEM	DOCUMENTATION	PREPARED BY	DATE
1.	Application Form	Health Infrastructure	20 October 2022
2.	Architectural Specification	Djrd Pty Ltd	09 December 2022
3.	Lift Design Certificate	Schindler Lifts Australia Pty Ltd	02 June 2023
4.	Construction Noise and Vibration Management Plan	E-LAB Consulting	28 June 2022
5.	Dangerous Goods Review and Compliance Assessment	Riskcon Engineering Pty Ltd	09 December 2022
6.	Electrical NER Details	Engineers Australia	Undated
7.	Mechanical Engineer Details	N/A	Undated
8.	Fire and Smoke Compartment Drawings	Djrd Pty Ltd	16 June 2023
9.	Structural Design Compliance Certificate	Eclipse Consulting Engineers	14 March 2023
10.	Structural Design Certification	ACOR Consultants Pty Ltd	11 August 2022
11.	Hydraulic Services Design Certificate	ACOR Consultants Pty Ltd	22 May 2023
12.	Mechanical Services Design Certificate	Fredon Air (NSW) Pty Ltd	22 May 2023
13.	Fire Engineering Report Revision 7	E-LAB Consulting	18 May 2023
14.	Fire Engineering Brief Questionnaire	FRNSW	16 November 2022
15.	Email Correspondence regarding submission of FEBQ	Blackett, Maguire & Goldsmith Pty Ltd	30 May 2023
16.	Section J, Part J1 JV3 Report Revision 5	E-LAB Consulting	18 November 2022



İTEM	DOCUMENTATION	PREPARED BY	DATE
17.	Acoustic Design Report	E-LAB Consulting	05 May 2023
18.	Electrical Design Certificate	Stantec	23 May 2023
19.	Food Premises Design Compliance Certificate	Cini Little Australia Pty Ltd	02 June 2022
20.	Consultants Advice Notice – Dangerous Goods	Riskcon Engineering	09 December 2022
21.	Fire Sprinkler and Fire Hydrant Design Certificate	Wagga Fire & Security	05 June 2023
22.	Structural Design Statement	Interspan (NSW) Pty Ltd	02 June 2023
23.	Architectural Design Certificate	DJRD Pty Ltd	16 June 2023
24.	Areas Excluded from CC4 Markup Plan	ACOR Consultants Pty Ltd	Various Dates
25.	D3.4 Exemption Markup Plans	ACOR Consultants Pty Ltd	Various Dates
26.	Structural Drawings	ACOR Consultants Pty Ltd	06 June 2023
27.	Electrical Services Plans	DJRD Pty Ltd	Various Dates
28.	Fire Services Plans and Specifications	Wagga Fire & Security Pty Ltd	Various Dates
29.	Hydraulic Services Plans	Quick Plumbing Group	23 March 2023
30.	Mechanical Services Plans	Fredon Air (NSW) Pty Ltd	Various Dates
31.	Hydrant Plans	Wagga Fire & Security Pty Ltd	Various Dates



#### CONDITIONS OF BCA CROWN CERTIFICATE

This Crown Certificate has been issued subject to the following conditions:

- 1. All architectural plans are to be issued in 'for construction' before construction commences for works associated with Crown Certificate 4 (Milestones 1 & 3 Fitout & Services).
- 2. This Crown Certificate does not certify compliance with the conditions of Development Consent. The building works should not commence until the Crown is satisfied that the conditions of development consent that are a pre-requisite to commencement have been appropriately addressed where relevant.
- 3. The following documents from BCA Stage 2 Crown List R13 dated 19.06.2023 is required to be provided to the satisfaction of BM+G prior to any works commencing:
  - a) SSDA Conditions A19: The external colours, materials and finishes of the building façade (and changes thereto) are to be consistent with the approved plans referenced in Condition A2. Any minor changes to the colour and finish of approved external materials to be approved by BM+G these minor changes being;
    - The alternative colour/material is of a similar tone/shade and finish to the approved external colours/building materials:
    - (ii) The quality and durability of any alternative material is the same standard as the approved external building materials;

Note: A copy of any approved changes to the external colours and/or building materials is provided to be **submitted** to the **Planning Secretary** for information.

- b) **SSDA Conditions B3:** Provide copies of the structural drawings prepared and signed by a suitably qualified practising Structural Engineer (including PT by Interspan or complete façade by Eclipse Engineers) that demonstrates compliance with this development consent before commencement of works.
- SSDA Conditions B4: The building façade and external wall assemblies (and changes thereto) are to comply with the following;
  - (i) Product(s) to be tested by a Registered Testing Authority and/or CodeMark (or other suitable evidence under NCC Cl. A5.2) to demonstrate that that external walls (including insulation and external linings) satisfy NCC 2019 (Amdt 1) Clause C1.9(e) and DGN 032 requirements including AS1530.1-1994 testing criteria for noncombustibility;
  - (ii) Any coating to the metal sheet product(s) to be tested by a Registered Testing Authority and/or CodeMark to satisfy NCC 2019 (Amdt 1) requirements including AS1530.3-1999 testing criteria and compliance with the 'deemed' non-combustibility under NCC 2019 (Amdt 1) Cl. C1.9(e)(v) which requires the product to be:
    - A. Pre-finished metal sheeting having a coating/combustible surface finish not exceeding 1 mm thickness and where the Spread-of-Flame Index of the product is not greater than 0.
  - (iii) For sarking-type materials Clause C1.9(e) permits materials that do not exceed 1mm in thickness and have a Flammability-Index not greater than 5.
  - (iv) Renders specified for use in associated with the external wall or an ancillary element are to be non-combustible.

BM+G comments within Crown List R13 dated 19.06.2023 to be satisfied. Subsequently, provide evidence that the products and systems proposed for use or used in the construction of external walls, (including finishes and claddings such as synthetic or aluminium composite panels), comply with the requirements of the BCA has been submitted to the Planning Secretary.

- d) SSDA Conditions B5: Provide evidence verifying that the following Pre-Construction activities have occurred:
  - (i) Consult with the relevant asset owner and utilities provider of services and Infrastructure that are likely to be affected by the development to make suitable arrangements for access to, diversion, protection and support of the affected infrastructure;
  - (ii) Prepare a Pre-Construction Dilapidation Report identifying the condition of all public (non-footpaths) that have potential to be affected;
  - (iii) Provide evidence that the Pre-Construction Dilapidation Report has been submitted to the asset owner and Council: and
  - (iv) Submit a copy of the Pre-Construction Survey Report to BM+G;
  - (v) Provide evidence that the Pre-Construction Dilapidation Report has been submitted to the Planning Secretary when requested.
- e) SSDA Conditions B6: Provide evidence verifying that the following Pre-Construction activities have occurred:
  - (i) Preparation of Pre-construction Dilapidation reports are to comply with E-LAB Construction Noise and Vibration Management Sub-Plan R002 Dated 18.05.2022 Section 6 and pre-commencement conditions B5, B6, B7 & B8.
  - (ii) Vibration monitoring is to be undertaken as follows:



- A. Attended vibration monitoring shall be conducted at the commencement of work in order to verify the safe working distances.
- B. If the levels are compliant with the vibration limits as listed in Section 4.2, then work may proceed based on the implementation of the measures detailed in this report.
- C. If there are exceedances, reasonable and feasible mitigation measures and additional vibration monitoring should be conducted.
- D. Measures to prevent cosmetic damage to surrounding structures are provided in Section 7.
- f) **SSDA Conditions B7:** Where the offer for a pre-construction survey is accepted (where required by Condition B6), the Applicant to arrange for a survey to be undertaken by a suitably qualified and experienced expert prior to the commencement of vibration generating works that could impact on the identified buildings.
- g) **SSDA Conditions B8:** Prior to the commencement of any vibration generating works that could impact on the buildings surveyed as required by Condition B7, the Applicant must:
  - Provided a copy of the relevant survey to the owner of each residential building surveyed in the form of a Pre-Construction Survey Report
  - (ii) Submit a copy of the Pre-Construction Survey Report to BM+G;
  - (iii) Provide evidence that the Pre-Construction Survey Report has been **submitted to the Planning Secretary** when requested.
- h) **SSDA Condition B14:** Prior to the commencement of construction, demolition work plans are required and to be accompanied by a written statement from a suitably qualified person that the proposals contained in the work plan comply with the safety requirements of the Standard.

Note: The work plans and the statement of compliance are to be submitted to BM+G and Planning Secretary.

- i) **SSDA Condition B16:** Ensure to obtain Planning Secretary acceptance of the Construction Environmental Management Plan (CEMP) to satisfy B16.
- j) **SSDA Condition B27:** Provide evidence of **submission to the Planning Secretary** a Heritage Interpretation Strategy and Plan for the archaeology and Aboriginal history of the site.
- k) **SSDA Condition B30:** Provide evidence of the retirement of credits in satisfaction of Condition B28 or payment to the Biodiversity Conservation Fund to **be provided to the Planning Secretary**.
- SSD Condition C25: The NER Civil Engineer's stormwater management system design for the development is to be submit to the satisfaction of the Water Authority/Council.
- m) SSD Condition E15 & E16: The Dangerous Goods report is to be updated in accordance with the BCA Stage 2 Crown List R13 dated 19.06.2023.
- n) CC Condition 14: NER Structural Engineering design certification prepared by Eclipse Consulting Engineers only covers façade elements relating to Ground and First Floor.
  - Crown Certificate No.4 is conditional that all elements of the structure, not covered by the Acor or Interspan certification, must be certified in design by an NER Structural Engineer and that certification/details be provided (and accepted) by BM+G before the relevant works commence; this includes façade elements relating to all parts of the building (other than Ground and First Floor), balustrades etc.
- o) **CC Condition 19**: Final Hydraulic design certification is require with the following updates; 1) remove statement of intent wording; 2) Include seismic restraints; 3) Reference latest Section J report; 4) Include hospital address.
- p) CC Condition 24 & 25: Before the relevant works comments BM+G must received the following as per BCA Stage 2 – Crown List R13 dated 19.06.2023:
  - (i) Provide dry fire design statement.
  - (ii) Ensure all fire services certificate(s) are issued by APFS's or Fair Trading registered certifiers who posses appropriate insurances relevant to their discipline and organisation; the Wagga Fire certifier appears to contain insurances only associated with 3D fire (not Wagga Fire).
  - (iii) Design certification must include seismic restraints; the Wagga Fire certificate refers to a separate designer's report/certification which must be provided to BM+G before the relevant works commence.
  - (iv) All Final services design certification and documents to be provided subsequent to any changes to the BCA report and or Fire Engineer Report.
- 4. Demolition works are to be undertaken in accordance with the documentation listed in Schedule 1 & AS 2601-2001.
- 5. There is to be no impact, disruption, impediment or modification to existing active or passive fire safety systems or egress arrangements within the existing hospital building as a direct or indirect result of the proposed works without prior consultation and approval by the LHD (as applicable) and the crown certifier (BM+G).
- 6. All building works associated with the subject development are to be carried out in accordance with the requirements of the Blackett Maguire + Goldsmith BCA Assessment Report Revision 10 dated 21 December 2022.
  - With relevance to the CSB, the key design items to be documented for compliance and accepted/approved before the relevant works include; finalisation of FRL's to loadbearing elements and FRL's associated with external wall portions exposed to



egress pathways or side/rear boundaries (such as fire stair discharges as per NCC CI. D1.7 or the NCS/St Vincent's Linkway subject to NCC CI. C3.2/C3.4); drenchers to protect exposed areas (where required under either NCC CI. D1.7 or NCC CI. C3.2/C3.4); fire and smoke compartments; and fire hydrant and fire hose reel coverage diagrams.

- 7. Before the relevant design approval is finalised BM+G are to receive documentation verifying compliance with the following:
  - a. Direction to be provided that there is no intention for non-gender (or 'all gender') specific sanitary facilities/signage over the whole facility;
    - In the absence of a separate Performance Solution, direction to be provided that there will be no unisex male/female signage/facilities OR unisex male/female ambulant signage/facilities over the whole facility except ward areas for patients only as per NCC CI. F2.3.
  - b. In the absence of a separate Performance Solution, direction to be provided that one island-type plunge bath will be provided in each storey (containing Ward Areas).
  - c. Hearing augmentation systems are capable of compliance with NCC C. D3.6 and D3.7.
- 8. This approval only relates to design solutions which are DtS compliant or design solutions permitted under Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023. Any new Fire Engineering must be permitted under an amended FEBQ and Fire Engineered report before the relevant works commence.
- 9. A statement from the applicant is to be provided confirming that they have received, reviewed and accept the Fire Safety Engineering Report before the relevant works commence.
- 10. Where the proposed demolition works necessitate the isolation and/or decommissioning of any existing fire services, particularly the fire hydrant system or the sprinkler system, then Fire & Rescue NSW and any relevant insurance providers should be notified prior to de-commissioning and/or isolation of the system.
- 11. All building works associated with the subject development are to be carried out in accordance with the approved documentation listed above in Schedule 1.
  - Any departure from the documentation cannot be undertaken without the review and approval by Blackett Maguire + Goldsmith.
- 12. All fire safety measures associated with the development, as listed under Schedule 4, are to be certified by the relevant discipline and implemented in accordance with these minimum standards of performance. Any change to this schedule is to be identified to BM+G for further review and comment.
- 13. Where there is any conflict between the Design Documentation and the advice provided by Blackett Maguire + Goldsmith, the advice issued takes precedence unless approved by Blackett Maguire + Goldsmith.
- 14. Any changes to the Architectural Documentation that may affect compliance with the Building Code of Australia or the referenced Australian Standards are to be appropriately disclosed to Blackett Maguire + Goldsmith for review.
- 15. Blackett Maguire + Goldsmith are to be contacted throughout the project for routine site inspections to ensure that the works are being carried out in accordance with the approved documentation.

# **Advisory Notes**

- 1. The head contractor is to obtain any relevant Approvals required by Griffith Council/Water Authority including the s.68 approval (or modifications thereto) prior to the commencement of works.
- 2. Where the cost of works exceeds \$25,000, provide evidence of payment of the Long Service Levy (0.35% of the cost of works) to the Long Service Levy Corporation. The amount paid where LSL applies is the cost of works Inclusive of GST which is the amount that should be shown on our Crown Certificate application.

Payment can be made online at <a href="http://www.longservice.nsw.gov.au">http://www.longservice.nsw.gov.au</a> Please quote the REF number when making payment.



#### CONDITIONS OF BCA CROWN CERTIFICATE

- 1. No approval is given nor implied for the construction of works beyond the scope specifically approved by the Crown Certificate 4 (Milestones 1 & 3 Fitout & Services) in association with the new four (4) storey CSB only.
  - No approval is given for any works outside these areas or changes which are not included in an SSDA Modification application.
- 2. Areas associated with CSB which need re-planning and/or third-party Accredited Access/DDA Consultant's Performance Solution(s) are excluded from this Crown certificate.
  - DJRD have prepared an architectural plan mark-up Dated 14.06.2023 which identifies areas which are subject to further client approval or have been identified as areas which likely requiring Performance-based Solutions. These areas are generally covered under the BM+G BCA and Access Report Revision 10 dated 21 December 2022.

Where departures occur between the DJRD mark-up Dated 14.06.2023 and the BM+G BCA and Access Report Revision 10 dated 21 December 2022; the BM\_G Report will prevail e.g. this mark-up does not appear to include the circulation/clearances associated with accessible sanitary facility entry doorset (Rm 2367); parents room (Rm 2339); and beverage bays (Rm 2184), turning circles leading to staff area (Rm 3234) and palliative care lounge (Rm 4264) etc which may require re-planning or third-party Accredited Access Consultants Performance Solutions in the absence of AS1428.1-2009.



# FIRE SAFETY SCHEDULE

Issued under cl. 78 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021

ADDRESS: 5-39 Animoo Avenue, Griffith NSW 2680

OWNER Health Administration Corporation

BCA Crown Certificate No.: CRO- 23021

The following essential fire safety measures shall be implemented in the whole of the building premises and each of the fire safety measures must satisfy the standard of performance listed in the schedule, which, for the purposes of Clause 78 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, is deemed to be the current fire safety schedule for the building.

## **SCHEDULE**

Statutory Fire Safety Measure	Design / Installation Standard	Existing	New / Altered	
NEW CLINICAL SERVICES BUILDING (BUILDING 36)				
Access Panels, Doors & Hoppers	BCA 2019 (Amdt 1) Clause C3.13, AS 1530.4 – 2014 & Manufacturer's specifications		<b>✓</b>	
Alarm Signalling Equipment	BCA 2019 (Amdt 1) Spec. E2.2a Clause 8 & AS 1670.3 – 2018		<b>✓</b>	
Automatic Fail-Safe Devices	BCA 2019 (Amdt 1) Clause D2.21		✓	
Automatic Fire Detection & Alarm System	BCA 2019 (Amdt 1) Spec. E2.2a AS 1670.1 – 2018 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		~	
Automatic Fire Suppression Systems (Residential Heads to Patient Care Areas only)	BCA 2019 (Amdt 1) Clause E1.5, Spec. E1.5 AS 2118.1 – 2017 & AS 2118.6 – 2012 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>√</b>	
Building Occupant Warning System activated by the Sprinkler System & Detection System	BCA 2019 (Amdt 1) Spec. E1.5, Clause 8 & AS 1670.1 – 2018, Clause 3.22 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		~	
Emergency Lifts	BCA 2019 (Amdt 1) Clause E3.4, AS 1735.2 – 2001 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		~	
Emergency Lighting	BCA 2019 (Amdt 1) Clause E4.2, E4.4 & AS 2293.1 – 2018		<b>✓</b>	
Emergency Evacuation Plan	AS 3745-2010 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>~</b>	
Exit Signs	BCA 2019 (Amdt 1) Clauses E4.5, E4.6 & E4.8 & AS 2293.1 – 2018		<b>✓</b>	
Fire Blankets	BCA 2019 (Amdt 1) Clause E1.6, AS 3504 – 2006 & AS 2444 – 2001		<b>✓</b>	



Statutory Fire Safety Measure	Design / Installation Standard	Existing	New / Altered
Fire Dampers	BCA 2019 (Amdt 1) Clause C3.15 & Spec. C2.5, AS 1668.1 – 2015 & AS 1682.1 & 2 – 2015& Manufacturer's specifications &		<b>√</b>
riie Dampeis	Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		v
Fire Doors	BCA 2019 (Amdt 1) Clauses C2.12, C2.13, C3.5, C3.7, C3.8, AS 1905.1 – 2015 & Manufacturer's specifications		<b>√</b>
Fire Hose Reels	BCA 2019 (Amdt 1) Clause E1.4 AS 2441 – 2005 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>√</b>
Fire Hydrant Systems	BCA 2019 (Amdt 1) Clause E1.3, AS 2419.1 – 2005, & AS 2118.6 – 2012 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		✓
Fire Rated Elements Loadbearing (Concrete or Masonry)	BCA 2019 (Amdt 1) Spec. C1.1		✓
Fire Seals	BCA 2019 (Amdt 1) Clause C3.15, AS 1530.4 – 2014 & AS 4072.1 – 2005 & Manufacturers' specifications & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>~</b>
Lightweight Construction	BCA 2019 (Amdt 1) Clause C1.8, AS 1530.4 – 2014 & Manufacturer's specifications		<b>√</b>
Fire Compartments, Walls & Floors	BCA 2019 (Amdt 1) Spec. C1.1 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>√</b>
Manual Call Points	BCA 2019 (Amdt 1) Section E		✓
Mechanical Air Handling Systems (automatic shutdown)	BCA 2019 (Amdt 1) Clause E2.2, Table E2.2a, AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012		✓
Paths of Travel	EP&A (DC&FS) Reg. 2021 Clause 109 & BCA Part D & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>√</b>
Portable Fire Extinguishers	BCA 2019 (Amdt 1) Clause E1.6 AS 2444 – 2001 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>√</b>
Pressurising Systems (Fire Isolated Stairways and associated Passageways)	BCA 2019 (Amdt 1) Clause E2.2, Table E2.2a, & AS/NZS 1668.1 – 2015		✓
Required Exit Doors (power operated)	BCA 2019 (Amdt 1) Clause D2.19(b)		✓
Self-Closing Fire Hoppers	BCA 2019 (Amdt 1) Clause C3.13 & AS 1530.4 – 2014		✓
Smoke Dampers	BCA 2019 (Amdt 1) Part E, AS/NZS 1668.1 – 2015, AS 1682.1 & 2 – 2015, Manufacturer's specifications		<b>√</b>
Smoke Compartments, Walls & Floors	BCA 2019 (Amdt 1) Clause C2.5, Spec. C2.5, C3.4, Spec C3.4 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>√</b>



Statutory Fire Safety Measure	Design / Installation Standard	Existing	New / Altered
Smoke Doors	BCA 2019 (Amdt 1) Clause C2.5, Spec. C2.5, C3.4, Spec C3.4 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>√</b>
Smoke Seals	Spec C3.4 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		<b>√</b>
Sound System & Intercom Systems for Emergency Purposes (SSISEP)	BCA 2019 (Amdt 1) Clause E4.9 & AS 1670.4 – 2018		<b>√</b>
Stand-by Power Systems	BCA 2019 (Amdt 1) Clauses E1.3, E3.4, E4.2 & E4.5 & AS 3000 – 2018		✓
Wall-Wetting Sprinklers	BCA 2019 (Amdt 1) Clause C3.4 & AS 2118.2 – 2010		<b>√</b>
Warning & Operational Signs	EP&A (DC&FS) Reg. 2021 Clause 108, BCA 2019 (Amdt 1) Clause D2.23, D3.6, E3.3 & AS 1905.1 – 2015		✓
Fire engineered Performance Solutions relating to:  1. Rationalisation of cavity barriers and gaps between slab edge and internal face of external walls.  a. Provide smoke proof cavity barrier / separation at the façade detail.  b. To permit lightweight fire- resisting construction/ fire walls to extend to smoke proof cavity barriers  2. Permit smoke compartments to exceed maximum allowable floor areas.  3. Permit combustible elements (timber noggins) in smoke and fire walls.  4. Justify the method of protection provided to openings and external walls.  5. Permit metal service penetrations not protected in accordance with Clause C3.15.  6. Omit smoke dampers in surgery and critical care rooms where ducts penetrate a fire or smoke wall.  7. Permit fire safety doors to swing in a single direction in lieu of both directions.  8. Permit extended travel distances within the building.  9. Permit horizontal exits to move into compartments that do not provide direct access to fire stairs or open space.  10. Permit discharge of horizontal exits into the front of house area occupied by the non-required non-fire isolated stairway and void.  11. Permit the hydrant and sprinkler booster to not be within sight of the main entrance of the building.  To permit a number of hydrant and hose reels are >4m from an exit  12. Permit fire extinguishers in small compartments in lieu of fire hose reels.  13. To omit sprinkler coverage in low	BCA 2019 (Amdt 1) Performance Requirements CP2, CP3, CP4, CP8, CP9, DP2, DP4, EP1.1, EP1.3, EP1.4, EP2.1, EP2.2, EP3.2, EP4.3 & Fire Engineered Performance Solution Report (P00164-07) prepared by E-Lab Dated 18.05.2023		✓



Statutory Fire Safety Measure	Design / Installation Standard	Existing	New / Altered
in accordance with the NCC2022 and smoke separation requirements.  To omit conceal sprinklers in sterile rooms.			
14. Provide Visual Indicator Alarms (VIDs) in lieu of system speakers in patient rooms and operating theatres.			
15. To permit non-patient care landings and mid-landings between Level 2 and Roof within the fire- isolated stair.			
<ul><li>16. Rationalise fire-resisting service shaft requirements</li><li>17. Egress via Separate Allotment</li></ul>			
<ul><li>18. Permit Lifts 3 and 4 to be Emergency Lifts which do not serve all levels.</li><li>19. Linkway Connection and Mimic</li></ul>			
Panel Requirements			
COMMUN	ITY HEALTH BUILDING (CHB) (BUILDING 33)		
Alarm Signalling Equipment (via existing main FIP)	AS 1670.3 – 2004	✓	
Automatic Fail-Safe Devices	BCA Clause D2.21	✓	
Automatic Fire Detection & Alarm System	BCA Spec. E2.2a AS 1670.1 – 2015 & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	✓	
Emergency Lighting	BCA Clause E4.4 AS 2293.1 – 2005	<b>✓</b>	
Emergency Evacuation Plan	AS 3745 - 2002	✓	
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8 AS 2293.1 – 2005	✓	
Fire Dampers	BCA Clause C3.15 AS/NZS 1668.1 – 2015 & AS 1682.1 & 2 – 2015	✓	
Fire Doors.	BCA Clause C2.12, C2.13, C3.5, C3.7, C3.8 AS 1905.1 – 2005	✓	
Fire Hose Reels	BCA Clause E1.4 AS 2441 – 2005 & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	<b>~</b>	
Fire Hydrant Systems	BCA Clause E1.3 AS 2419.1 - 2005	<b>~</b>	
Fire Seals	BCA Clause C3.15 AS 1530.4 – 2005 & AS 4072.1 – 2005 Manufactures Specifications	✓	
Fire Resisting Construction	BCA Section C & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	✓	
Lightweight Construction	BCA Clause C1.8, AS 1530.4 – 2014 & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	<b>~</b>	
Manual Call Points	BCA Section E	✓	



Mechanical Air Handling Systems (automatic shutdown)	BCA Clause E2.2 AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012	<b>✓</b>
Paths of Travel	EP & A Regulation Clause 186	✓
Portable Fire Extinguishers	BCA Clause E1.6 AS 2444 – 2001 & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	✓ ·
Required Exit Doors (power operated)	BCA Clause D2.19(d)	✓
Smoke Dampers	AS/NZS 1668.1 – 2015 & AS 1682.1 & 2 – 2015	<b>✓</b>
Smoke Seals	BCA Spec. C3.4	<b>✓</b>
Sound System & Intercom System for Emergency Purposes	BCA Clause E4.9 AS 1670.4 - 2015	<b>✓</b>
Warning & Operational signs	BCA Clause D2.23. Section 183 of the EP & A Regulations 2000, AS1905.1 – 2005	<b>✓</b>
<u>INTE</u>	NSIVE CARE UNIT (ICU) (BUILDING 1)	
Access Panels, Doors & Hoppers	BCA Clause C3.13 AS 1530.4 – 2005	<b>✓</b>
Alarm Signalling Equipment (via existing main FIP)	AS 1670.3 – 2004	<b>✓</b>
Automatic Fail-Safe Devices	BCA Clause E2.2a, D2.21, AS1668.1, AS1670.1, AS1905, AS4178	✓
Automatic Fire Detection & Alarm System	Ord 70.27.4, CA.15, AS1670& BCA Spec. E2.2a AS 1670.1 – 2015 & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	✓
Emergency Lighting	BCA Clause E4.2, E4.4, & AS 2293.1 & AS 2293.1 – 2005	<b>✓</b>
Emergency Evacuation Plan	AS 3745 - 2002	<b>✓</b>
Emergency Warning Intercom System (EWIS)	BCA Spec E2.2a, E4.9 and AS2220.1	✓
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8 AS 2293.1 – 2005	<b>✓</b>
Fire Blankets	AS3504, AS2444	<b>✓</b>
Fire Dampers	BCA Clause C3.15 AS/NZS 1668.1 & AS 1682.1 & 2 & AS/NZS 1668.1 – 2015 & AS 1682.1 & 2 – 2015	<b>✓</b>
Fire Doors.	Ord 70.22.7 CA 15, BCA Spec C3.4, AS1905.1	<b>✓</b>
Fire Doors.	BCA Clause C2.12, C2.13, C3.5, C3.7, C3.8 AS 1905.1 – 2005	<b>✓</b>
Fire Hose Reels	Ord 70.27.2 Min Spec 10 & BCA Clause E1.4 AS 2441 – 2005 & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	~
Fire Hydrant Systems	Ord 70.27.3 Min Spec 10 & BCA Clause E1.3 AS 2419.1 - 2005	✓



Fire Seals	BCA Clause C3.15 AS 1530.4 & AS 4072.1 Manufacturers Specifications	<b>*</b>
Fire Seals	BCA Clause C3.15 AS 1530.4 – 2005 & AS 4072.1 – 2005 Manufacturers Specifications	✓
Fire Walls	BCA Spec. C1.1	✓
Lightweight Construction	BCA Clause E1.8, C1.8, AS 1530.4 & BCA Clause E1.8, C1.8, AS 1530.4 – 2014 & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	<b>✓</b>
Manual Call Points	BCA Section E	✓
Mechanical Air Handling Systems (automatic shutdown)	BCA Clause E2.2 AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012	✓
Paths of Travel	EP & A Regulation Clause 186	✓
Perimeter Vehicular Access	BCA Clause C2.3, C2.4	✓
Portable Fire Extinguishers	BCA Clause E1.6 & AS 2444 & BCA Clause E1.6 AS 2444 – 2001 & Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019	<b>✓</b>
Required Exit Doors (power operated)	BCA Clause D2.19(d)	✓
Smoke Dampers	AS/NZS 1668.1 – 2015 & AS 1682.1 & 2 – 2015	✓
Smoke Doors	BCA Spec.C2.5 & C3.4	✓
Smoke Seals	BCA Spec. C3.4	✓
Smoke Walls	BCA Spec. C2.5	<b>√</b>
Sound System & Intercom System for Emergency Purposes	BCA Clause E4.9 AS 1670.4 - 2015	<b>✓</b>
Stand-by Power Systems	AS/NZS3009	✓
Wall-wetting sprinklers	BCA Clause C3.4 AS 2118.2 – 2010	<b>√</b>
Warning & Operational signs	BCA Clause D2.23. Section 183 of the EP & A Regulations 2000, AS1905.1 – 2005	<b>√</b>
<u>IN</u>	PATIENT UNIT (IPU) (BUILDING 2)	
Access Panels, Doors & Hoppers	BCA Clause C3.13 AS 1530.4 – 2005	<b>√</b>
Alarm Signalling Equipment (via existing main FIP)	AS 1670.3 – 2004	<b>√</b>
Automatic Fail-Safe Devices	BCA Clause E2.2a, D2.21, AS1668.1, AS1670.1, AS1905, AS4178 BCA Clause D2.21	<b>✓</b>
Automatic Fire Detection & Alarm System	Ord 70.27.4, CA.15, AS1670 & BCA Spec. E2.2a AS 1670.1 – 2015 Ord 70.27.4, CA.15, AS1670	<b>✓</b>
	<u> </u>	



Emergency Lighting	BCA Clause E4.2. E4.4 & AS 2293.1 AS 2293.1 – 2005	<b>✓</b>	
Emergency Evacuation Plan	AS 3745 - 2002	✓	
Emergency Warning Intercom System (EWIS) (existing)	BCA Spec E2.2a, E4.9 and AS2220.1	<b>√</b>	
Exit Signs	BCA Clauses E4.5, E4.6 & E4.8 AS 2293.1 – 2005	<b>✓</b>	
Fire Blankets	AS3504, AS2444	✓	
Fire Dampers	BCA Clause C3.15 AS/NZS 1668.1 & AS 1682.1 & 2, AS/NZS 1668.1 – 2015 & AS 1682.1 & 2 – 2015	~	
Fire Doors.	Ord 70.22.7 CA 15, BCA Spec C3.4, AS1905.1 & BCA Clause C2.12, C2.13, C3.5, C3.7, C3.8 AS 1905.1 – 2005	<b>~</b>	
Fire Hose Reels	Ord 70.27.2 Min Spec 10, BCA Clause E1.4 AS 2441 – 2005	<b>✓</b>	
Fire Resistance Levels (External Wall System)	Ord 70.27.3 Min Spec 10, Performance - Fire Engineering Report No. SY180432 Rev R1.0 prepared by Warringtonfire dated 2 August 2019 including:  External walls including all components incorporated within them must be noncombustible in accordance with clause C1.9 of the NCC unless otherwise specified in the report. The sarking material incorporated in the external wall systems of the ICU and IPU expansion must not be more than 1mm in thickness and have a flammability index no greater than 5.	•	
Fire Seals	BCA Clause C3.15 AS 1530.4 & AS 4072.1, AS 1530.4 – 2005 & AS 4072.1 – 2005 Manufacturers Specifications	<b>√</b>	
Lightweight Construction	BCA Clause E1.8, C1.8, AS 1530.4, BCA Clause C1.8, AS 1530.4 – 2014	<b>~</b>	
Manual Call Points	BCA Section E	✓	
Mechanical Air Handling Systems (automatic shutdown)	BCA Clause E2.2 AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012	<b>√</b>	
Paths of Travel	EP & A Regulation Clause 186	✓	
Perimeter Vehicular Access	BCA Clause C2.3, C2.4	✓	
Portable Fire Extinguishers	BCA Clause E1.6 & AS 2444 AS 2444 – 2001	<b>√</b>	
Required Exit Doors (power operated)	BCA Clause D2.19(d)	✓	
Sound System & Intercom System for Emergency Purposes	BCA Clause E4.9 AS 1670.4 - 2015	<b>√</b>	
Stand-by Power Systems	AS/NZS3009	✓	
Warning & Operational signs	BCA Clause D2.23. Section 183 of the EP & A Regulations 2000, AS1905.1 – 2005	<b>~</b>	



# INTENSIVE CARE UNIT (ICU) (BUILDING 1), IN PATIENT UNIT (IPU) (BUILDING 2) & COMMUNITY HEALTH BUILDING (CHB) (BUILDING 33)

# Summary of Existing Fire Engineered Performance Solutions Fire Engineering Report No. SY180432 Rev 1.0 dated 2 August 2019 prepared by Warringtonfire

	Performance Solution	Standard of Performance	Existing	New / Altered
1.	The new external walls of the IPU and ICU expansions include sarking material that is combustible.	CP2 & CP4	<b>~</b>	
2.	The following loadbearing elements of the ICU expansion achieve a 1- hour fire rating instead of 2 hours:  Columns within external walls of the ground floor expansion  External columns on the lower ground floor which support the expansion	CP1 & CP2	✓	
3.	A number of smoke doors within the ACH swing against the direction of egress	DP2 & DP4	<b>~</b>	
4.	Portable fire extinguishers will be provided to the existing waiting room within the ICU in lieu of fire hose reel coverage.	EP1.1	<b>√</b>	



#### INSPECTION REQUIREMENTS

## **REQUIRED INSPECTIONS**

Please ensure that our office is contacted to undertake the following inspections throughout the construction program:

- + Completion of smoke proof walls prior to installation of ceiling.
- + Completion of fire rated walls prior to installation of ceiling.
- + Installation of concealed essential fire safety measures prior to covering.
- + Preliminary Final Inspection and onsite testing of all active fire safety systems. Prior to completion of building works.
- + After the building works has been completed.